Mediawatch

If you can't beat them…

Bernard Dixon

Though exceptions spring readily to mind, most scientists are essentially rational creatures, not given to hyperbole on a public stage. In contrast to the extravagant approaches often used by television producers, and by campaigners against animal experimentation or gene technology, scientists invariably want reason to win the day.

This is probably a mistake, an echo of the desiccated objectivity which Peter Medawar [1] saw as the erroneous heart of the scientific paper. None of us is motivated solely by logic, but by emotion and happenstance too. Besides, colour and sensationalism are inherent in modern popular culture, and are clearly adopted by those fighting against developments in science and technology. Why shouldn't the defenders adopt similar tactics?

Myc Riggulsford, Director of the Research for Health Charities Group, has obviously asked himself this question. His answer, exemplified in talks on laboratory animals given to schools, is to combine reason with colour and with a robust examination of the ethical justification for humane animal work. Traditionally, defenders addressing this issue have focussed largely on the stringency of regulation, reductions in the numbers of animals used each year, and the fact that most are rodents rather than cats or dogs. Trying not to be drawn into ethical discussion, they have eschewed appeals to the emotions of the sort long practised by 'anti-vivisection' organizations.

Riggulsford uses very different tactics, exemplified by his slides. Two show competitors at the annual British Transplant Games — adults breaking sprint records after being given new hearts, and children who have received heart–lung transplants. Another is an overhead view of a 1950s hospital ward occupied by patients in cylindrical iron lungs, each a victim of paralytic poliomyelitis. These were not patients who would recover. The iron lung would be home for the rest of their lives.

Riggulsford asks a simple question. Was it justifiable for small amounts of humane animal research to be conducted so that young victims of incurable heart disease could regain full health, and so that polio could be defeated by immunization? The question, posed by use of strong images, appeals to our humanity and ethical outlook as much as our reason.

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There is scope for far greater use of Riggulsford's approach — dramatizing, certainly, but not misrepresenting the importance of science and technology. The pharmaceutical industry, for example, would be amply justified in sponsoring advertizing showing the ranks of coffins containing the dead bodies of the millions of infants who would have died an ugly death had they not received diphtheria vaccine.

Television programmes critical of developments in biomedical research often brandish colourful images whose impact is heightened when the opposing case is either not presented at all, or presented in a far less sensational way. An example is 'Dr Satan's Robot', an edition of the normally excellent *Equinox* series shown on BBC Television on 15 December last year. Replete with suggestions that science was "hurtling out of control" (as the *Radio Times* put it), the programme must have confused and alarmed many viewers.

No actual evidence was presented to establish that science really was out of control. The producer avoided the need to describe the committees, laws and inspectors that regulate work in genetic manipulation and animal experimentation by simply not mentioning them. Instead, the first half used a helter-skelter sequence of scary images, together with clips from fictional movies, to foster alarm about genetic engineering in particular.

Yet most of the footage did not illustrate genetic work at all, but the highly contentious research of Robert White on head transplantation in dogs. And comments about the wholesomeness of the natural world, before the advent of medical science, were not accompanied by reminders that it also included horrors such as children choking to death with diphtheria.

The second half of the programme did put across some of the arguments in favour of applying molecular genetics to health care; however, the positive endorsements of bioscience and its application were laid before us without any of the emotional and visual impact of the destructive arguments earlier. 'Dr Satan's Robot' — the title alone signified the producer's intentions — ended with more of the sensationalism, alarm and foreboding that characterized the first half of the programme.

Conclusion: emotion and theatricality have a greater place than they are often allowed in the presentation of scientific issues through the media and other channels of public communication. But they can do great harm in the hands of a propagandist determined to whip up ill-informed fears. Particularly mischievous is a programme which purports to present opposing perspectives on a topical biomedical issue, but does so with far greater visual and emotional impact on one side than on the other.

References

1. Medawar PB: Is the scientific paper a fraud? In *The Threat and the Glory*. Edited by A. Phillips. Oxford: Oxford University Press; 1990:228–233.

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